## OUR ENGRAVINGS.

Sussex Bull.—This is a specimen from Mr Whitfield's herd. The breed has been wonderfully improved since I saw them at Lewes, in 1852. Then, they were coarse, rough, raw-boned brute; only fit for draught and second- or thirdrate beef; rarely coming under the butcher's hand before they were eight or nine years old. They are not easily distinguished, now, from the larger Dovons. No. good milkers, but very precocious; in fact, they make beef quicker than any other breed, judging from the youthful examples shown at the Smithfield Club for the last few years.

Hampshire Down Ram .- Barring the near-side leg, a good engraving of a good specimen of the breed. Strong enough for our climate, I think; at least, I don't fancy any man with an eye for a sheep can find much fault with this one.

Forest Trees .-

## Turnips as a basis—a departure. Colonel F. D. Curtis replies to " Ampere." To the Gazette.

Turnips can be made a blessing in more ways than one. In the great West, where corn is so abundant, I suppose turnips are despised or considered of very little account. The large ranges of corn-fields afford a great amount of fodder in the autumn; but even in the West, with this bountiful advantage, there is a time when the frosts have so injured the cornstalks that they contain very little nutriment, and, however plentiful the supply, catale will shrink in condition if confined to them for food. At this period, turnips may be made to supply ample food and in a form as cheap as anything of equal value, not excepting corn. Meal feeding, or its equivalent, must be followed at this season of the year for fattening animals—cows or any kind of stock—if it is desired to hold them in condition.

Even where the custom is to let the cattle range in the corn-fields to cat cars and all, with the hogs following them, it might be well to have a change to a turnip field. The succulent and cooling effect of the turnips and the leaves most certainly would counteract the dry and heating action of the corn. In my opinion they would be just the thing to keep cittle healthy, while allowed all the corn they would cat, and I am sure they would conduce to better digestion and more rapid fattening. There can be no doubt that they would be valuable for breeding animals. A Western farmer who is rank in corn notions—and who among them is not ?—will probably sneer at my suggestions regarding turnips, and will say there is no good in such watery stuff. It is the very fact that they are "such watery stuff" which gives them their chief value. The same criticism may be applied to grass, as it is "watery stuff" compared to dry hay or corn. Yet it is this same kind of "watery stuff" which animals require to keep them healthy, and on which they thrive the best. It constitutes the greatest panacea for the ills of the animal kingdom, and many a fevered horse, hog, cow and steer, could they have spoken, would, no doubt, have thanked the Giver of all good gifts for " such watery stuff." It is the want of more succulent food which has laid the foundation of hog-cholera, and Western breeders will find, in time, that an exclusive corn diet will injure their stock. Like whisky drinking, it " will fetch them " in the end.

With all the want of appreciation of turnips in this country and the general notion of farmers that they will not pay, let it be remembered that the farmers of Great Britain pay their rent with " such watery stuff; " and that their annual rent is more per acre than the average price of American farms.(1) This fact I consider to be a conclusive argument, and a farmer. complete rebuttal to all prejudices and notions to the contrary.

(1) Average rent of English land is \$6.00 an acre. A. R. J. F.

Turnips do possess a value not only to bridge over the frosty period and afford wholesome and plentiful food in the place of frost-bitten and almost worthless grass and as supplementary food in connection with g ... feeding, in which form they add to its value by making it mor digestible, and by keeping the stomach in better tone and creating a healthy appetite and more invigurating blood. In addition to these values, which are enough to compensate for all the trouble and cost of growing the crop, they put land in the best possible order for any kind of a crop, and at the same time they will add to its richness if fed on the ground. This is an idea that few American farmers fully appreciate, viz : the importance and value of feeding crops on the ground to enrich the land. Our processes are more of the robbing order -to gather rather than to spend. Turnips may be made to do an important work in the older States in the way of renovating the soil. Every farm should have a big patch or field of turnips. The best could be gathered and stored for winter feeding, to make beef and mutton and for the young animals, and the balance be fed out on the ground. This course of feeding cannot continue in our rigorous climate all winter, as it does in England, but it may be continued during a period of two months; and, what is of the most importance, during the very time when other foods, in the form of pasture, are almost worthless, and to depend upon hay and grain is most expensive. The loss of flesh in stock before going into winter quarters is in the aggregate immense, and cannot be avoided without extra feed in some form; for during the latter part of the fall, pastures can not furnish sufficient nourishment to keep stock growing, or even to hold their own. There are a great many patches of land about a farm which may be utilized to good advantage by putting in turnips. The process is exceedingly simple. All that is required is to make the ground rich, and it matter not how or with what fertilizer, barn-yard manure or some sort or rhosphate; and to make the surface mellow, and then scatter the seed and cover it slightly. A rake can be used to do this; brush drawn over it, or a roller. Surely, no crop requires less culture. This is not all. It can be made to follow other crops, and really costs nothing except the labor of putting in; and when fed on the ground there is no cost in harvesting. The refuse leaves and small ones will go quite fur in paying the cost of harvesting.

Turnips may follow a crop of spring grain, wheat, or early potatoes; or an old pasture may be turned over and made an excellent place for them. A clover sod, after the hay has been gathered, is nicely adapted for them, as the ground will naturally be faellow. A couple of plowings will fit a pasture sod for them, and make the sward rotten, which will be all the better to make a prompt growth. Wood ashes are a good fertilizer for turnips, and the best of any single thing. They feel the effect of plaster and also of phosphates as much as any crop. I have often had a large amount of feed fromturnips sown in the corn-field, especially where there were skipped hills, or the corn was thin from any cause. It is good economy and time well spent to sow turnip seed in every vacant spot in the garden, or in the corn or potato fields, as something can be had for almost nothing, and at the same time the weeds will be kept under. I hope to see the fime when twonips will be one of the regular crops of the farm, and, as one catgrowth of this reform, more meat produced, which will enlarge the area of producing manure from the barn-yard. This is what every farmer wants, a big barnyard and plenty in it. There is no other basis which will be lasting, and to accomplish this end should be the study and effort of ever-

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